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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/645,920	08/20/2003	John M. Jones	GDT-P0018-01	9299

27268 7590 09/13/2006

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INDIANAPOLIS, IN 46204

EXAMINER
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DEVOTI, PAUL D

ART UNIT	PAPER NUMBER
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3637

DATE MAILED: 09/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/645,920	<b>Applicant(s)</b> JONES ET AL.	
	<b>Examiner</b> Paul Devoti	<b>Art Unit</b> 3637	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 10 July 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 44-73 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 44-73 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 44, 47, 48, 59, 60, are rejected under 35 U.S.C. 102(b) as being anticipated by Lynn et al. (US 6093481).
3. Regarding claims 44, 59, 60, Lynn discloses a method for forming a composite liner panel. The liner panel has a substantially gas impermeable barrier layer (11) and a structural polymer resin layer (22) disposed coplanar to the barrier layer (11). A thermal insulated core layer (13) is made of polyurethane foam (column 5, line 52) and would inherently be gas impregnated during its formation. The substantially gas impermeable barrier layer (11) prevents the out-gassing of cell gas from the core layer (13) through the structural polymer resin layer (22). The barrier layer (11) is bonded to the structural polymer resin layer, forming a laminate liner panel, and attached to the core layer (13).
4. Regarding claim 47, the structural polymer binds with adhesive, which is a thermoset material (column 4, lines 13-14).
5. Regarding claim 48, the composite liner panel comprises adhesive (15) between the barrier layer (11) and structural polymer resin layer (22).

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 45, 46, 49-51, 54-58, 61-66, 69-73, are rejected under 35 U.S.C. 103(a) as being unpatentable over Lynn et al. (US 6093481).

8. Regarding claims 45, 46, 61, 62, Lynn discloses everything previously mentioned, including the barrier layer and polymer resin layer are laminated (line 5 of abstract). The lamination process would obviously include heating and compressing the layers together, and cooling the laminate afterwards, and this would be an obvious method of laminating the layers together, as it is a well known process to those skilled in the art.

9. Regarding claims 50, 65, Lynn discloses everything previously mentioned, including the substantially gas impermeable layer (11) is a metallized polyester film (column 4, lines 5-7).

10. Regarding claims 51, 66, Lynn discloses everything previously mentioned, including an adhesive (15) between the layers (column 4, lines 9-12).

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11. Regarding claims 54, 69, Lynn discloses everything previously mentioned, including a second structural polymer resin layer (23) coplanar to the gas impermeable barrier layer (11) and on the opposite side of the structural polymer resin layer (22).

12. Regarding claims 55, 70, Lynn discloses everything previously mentioned, including a second adhesive layer (15) (as seen in Figures 3,4) between the layers.

13. Regarding claims 56, 57, 71, 72, Lynn discloses everything previously mentioned, including the structural polymer resin layer is fiber reinforced with glass (column 4, lines 57-58).

14. Regarding claim 63, the composite liner panel comprises adhesive (15) between the barrier layer (11) and structural polymer resin layer (22).

15. Regarding claims 49, 64, Lynn discloses everything previously mentioned, including coating the barrier layer and structural polymer resin layer of the composite liner panel (column 3, lines 64-67). Spraying would be an obvious method of coating the composite liner panel of Lynn to one having ordinary skill in the art.

16. Regarding claims 58, 73, Lynn discloses everything previously mentioned, including a scrim layer (column 8, line 16) which would be coplanar with the second structural polymer resin layer (23) and core layer (13).

17. Claims 53, 68, are rejected under 35 U.S.C. 103(a) as being unpatentable over Lynn et al. (US 6093481) in view of prior art of Lynn et al.

18. Regarding claims 53, 68, Lynn discloses everything previously mentioned, but does not disclose the gas impermeable barrier layer (11) is a metal foil. Prior art of

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Lynn (column 1, lines 26-31), however, discloses outer facing sheets made of metal foils. Therefore, it would have been obvious to one having ordinary skill in the art at the time of invention to modify Lynn's composite liner panel to include a barrier layer of metal foil, as this would provide an inexpensive, yet impermeable barrier layer with a high insulation value.

19. Claims 52, 67, are rejected under 35 U.S.C. 103(a) as being unpatentable over Lynn et al. (US 6093481).

20. Regarding claims 52, 67, Lynn discloses everything previously mentioned, but does not disclose the gas impermeable barrier layer is a metallized polypropylene film. Polypropylene is a common polymer material, and it would have been obvious to one having ordinary skill in the art at the time of invention to make the barrier layer of a metallized polypropylene film, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

### ***Response to Arguments***

21. Applicant's arguments with respect to claims 44-73 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

22. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul Devoti whose telephone number is 571-272-2733. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lanna Mai can be reached on 571-272-6867. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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09/08/06

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